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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/048,054	01/25/2002	Masashi Otsuki	111788	8751

7590

08/23/2005

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EXAMINER

WEINER, LAURA S

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/048,054

Applicant(s)

OTSUKI ET AL.

Examiner

Laura S. Weiner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Species of Formula (2) in the reply filed on July 8, 2005 is acknowledged. The traversal is on the ground(s) that there is not a burden to search both species. This is not found persuasive because the two species are very different. Formula (1) requires an X component which is not required in Formula (2).

The requirement is still deemed proper and is therefore made FINAL.

2. Claim 7 is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on July 8, 2005.

Response to Arguments

3. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

4. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to

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one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no support in the specification for "at least one R4 is halogen element". There is support for both R4 being a halogen element or both R4 being a monovalent substituent".

Claim Rejections - 35 USC § 102

Claim Rejections - 35 USC § 103

5. Claims 1-4, 8-12, 15-16, 18-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kajiwara et al. (JP 6-013108, translation).

Kajiwara et al. teaches a nonaqueous electrolyte battery comprising a solution that lithium salt is dissolved in phosphagen derivative or solution that lithium salt is dissolved in solvent that nonprotic organic solvent is further added to phosphagen derivative as electrolyte. Kajiwara et al. teaches on page 2 of the translation and page 1 of correction page, that the phosphazene derivative can be $(\text{NPCl}_2)_n$ where n is 3-15. Kajiwara et al. teaches on page 2 of correction page that it is desirable to have 50-90% of the phosphazene present. Kajiwara et al. teaches on page 1 of the correction page that the viscosity at 25 degrees C is 300 or less cPs [0.300 Pa s]. Kajiwara et al. teaches on page 3, [0021], of the translation that the aprotic solvent can be ether compounds, ester compounds, etc. such as 1,2-dimethoxyethane, tetrahydrofuran and propylene carbonate, etc. and teaches in [0024], that the salt can be LiPF_6 , LiBF_4 , etc.

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Since Kajiwara et al. teaches the exact same phosphazene derivative having at least one R4 be a halogen element, then inherently the same phosphazene derivative having a flash point of not lower than 100 degrees C or the potential window of the phosphazene derivative is such that its lowermost limit is at most +0.5 V or 0 V and its uppermost limit is at least +4.5 V or +5 V or the phosphazene derivative in the lithium salt solution is at least 2.0 or 4.0 mS/cm or the dielectric constant is at least 15 must also be obtained.

In addition, the presently claimed property of the phosphazene derivative having a flash point of not lower than 100 degrees C or the potential window of the phosphazene derivative is such that its lowermost limit is at most +0.5 V or 0 V and its uppermost limit is at least +4.5 V or +5 V or the phosphazene derivative in the lithium salt solution is at least 2.0 or 4.0 mS/cm or the dielectric constant is at least 15 would have obviously have been present once the Kajiwara et al. product is provided. *In re Best*, 195 USPQ 433 (CCPA 1977).

Claim Rejections - 35 USC § 103

6. Claims 5-6, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kajiwara et al. (JP 6-013108, translation).

Kajiwara et al. teaches the claimed invention as explained above but does not teach that the solvent can be ethylene carbonate.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use ethylene carbonate because one skilled in the art would


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expect similar chemical structures to exhibit similar properties. See *In re Payne*, 606 F.2d 303, 203 USPQ 245, 254 (CCPA 1979). See *In re Papesch*, 315 F.2d 381, 137 USPQ 43 (CCPA 1963) and see *In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1991). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use ethylene carbonate instead of propylene carbonate because one would expect these solvents to function in a similar manner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura S. Weiner whose telephone number is 571-272-1294. The examiner can normally be reached on M-F (6:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Laura S Weiner
Primary Examiner
Art Unit 1745

August 18, 2005